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A Sincere Thank You

Our community came through for us, and we are humbled by your support. Your generous donations helped us meet the financial goal of our Community Fund Drive, which aimed to fund our operating budget for the next two years, to endow our future and support stewardship of our easements and the Killbuck Swamp Preserve. Thank you. To have such a wonderful outpouring of support from the community is exciting, and it reinforces our confidence that we are doing the right thing by conserving local land. We met a lot of great people throughout the campaign and look forward to continue building these relationships.



We would like to celebrate a successful campaign with you and your families. Please save the date for Sunday, September 17th, as we are planning a KWLT Supporter Appreciation Party to be held on the Hemlock Campus of Camp Nuhop, which is adjacent to Mohican State Park in Perrysville. Details and an invitation will be sent later this summer.

Because of your support, Killbuck Watershed Land Trust will continue our community's effort to preserve local farmland, create more space for wildlife and provide access to natural areas that will serve the public for many years to come.

Thank you.

Tate, Randy, Linda, Ron, Robert, Jael & Kevin, Michelle, Dan, Krista, Matt, Dave, Maryanna & Karen

5 Ways You Can Support Killbuck Watershed Land Trust

In addition to cash gifts, there are many other ways to support Killbuck Watershed Land Trust.

- 1 Donations of Securities A direct transfer of securities (stocks, bonds or mutual funds) to KWLT will avoid taxable capital gains and the sale transaction costs."
- 2 Life Insurance Benefits Name KWLT as a beneficiary on a portion or all of your life insurance policy benefits.
- 3 Make a Qualified Charitable Deduction (QCD) from your IRA

- Your gift will be considered as part of your Required Minimum Distribution (RMD) and will avoid both federal and state income tax.
- 4 Name KWLT as a beneficiary of your will, trust or charitable trust or qualified retirement plan As you plan your estate, your advisors can help you send a benefit to KWLT through a variety of "Planned Gifts."
- **5 Gift Real Property** to KWLT

Contact our Executive Director, Tate Emerson, who can assist you with your planning. The Wayne County Community Foundation manages several funds on our behalf and can also assist you with planning.

Tate Emerson 330-804-KWLT (5958) tate@killbuckwatershedlandtrust.org



waynecountycommunityfoundation.org 330-262-3877



Ripples

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Killbuck Watershed Land Trust is a tax exempt organization pursuant to Section 501(c)3 of the IRS Code.

KWLT Volunteers Make it Happen

A special thanks to the wonderful group of KWLT volunteers who have helped at the Killbuck Swamp Preserve this past season, including from Holmes Soil & Water Conservation District and Crow Works in Killbuck.

On October 25, 2022 KWLT partnered with Arc of Appalachia staff to begin trail benching at the Quarry Bluff trailhead along a section of hillside and at the ridgetop quarry to connect two abandoned quarry access lanes.

The next day, twelve KWLT volunteers worked with four Arc of Appalachia
Trailblazers to complete benching and roughing out the Quarry Bluff trail at Killbuck Swamp Preserve. The approximately one-mile loop trail leaves from the parking lot, ascends the scenic bluff overlooking the Killbuck Swamp Preserve, visits the long abandoned sandstone quarry and

Spatterdock Pond to gather over 500 lbs. of trash and about 30 tires that had been discarded along State Route 60 onto the Killbuck Swamp Preserve.



Native trees and shubs are planted in April

Thanks to the support from Holmes Soil and Water Conservation District and the wonderful

trees and shrubs around the access points at Turtle Pond, Quarry Bluff, and Crane Swamp. Volunteers planted Redbud, Swamp White Oak, and Ohio Buckeye trees for shade, as well as Steeple Bush, Ninebark, and Elderberry along the border and a steep embankment at Killbuck Swamp Preserve.

These projects could not be accomplished without the support of our conservation partners

and the growing community of volunteers who devote their time to help KWLT. If you are interested in becoming involved and volunteering with KWLT, please let us know and we'll add you to our volunteer list.

kWLT Volunteers work on the Quarry Bluff Trail with the Arc of Appalachia travels across the ridgeline before descending back to the Quarry Bluff Trailhead and parking lot. The trail should be blazed and ready for visitors this summer. The autumn, winter, and early spring views from the quarry are inspiring.

and the grow who devote to are interested volunteering we'll add you we'll add you

On March 28, eighteen KWLT volunteers converged at the southeast corner of

Randy

Randy Carmel Board President

Local folks working together to preserve local land.

Climate Change and the Many Benefits of Trees

During the late evening of June 13 and early morning of June 14 last year, a powerful derecho ripped through Richland, Wayne, and Holmes Counties. The powerful winds uprooted and snapped thousands of trees, which devastated woodlots and landscapes, downed powerlines, and damaged buildings and other property throughout the region. Wind is the most frequent natural disturbance and most important driver of succession in the deciduous forests of the eastern United States. When strong wind such as derechos and tornados topple trees, they create openings in the forest canopy. As new seedlings establish and suppressed saplings grow and mature in the light gaps, the forest canopy gap eventually closes until the cycle eventually repeats itself. Over time, wind disturbance appears here and there throughout the forest, which creates a shifting mosaic of diverse tree species of different ages that contributes to a healthy and resilient forest ecosystem. In an isolated woodlot or residential landscape, however, wind disturbance can eliminate many if not all trees, which often can only be replaced by replanting.

Earth's climate has steadily warmed since the beginning of the 20th Century with most warming occurring since 1980. The amount and rate of warming has closely tracked the accumulation of anthropogenic greenhouse gases in the atmosphere, the most important of which are carbon dioxide and methane. As the amount of energy in the atmosphere has increased, so has the frequency of severe windstorms. For example, a University of Minnesota study data found that the frequency of treedamaging storms in Minnesota increased from average of 32 per year in the 1960s to 350 per year since 2010.

Trees are an ideal nature-based solution to climate change. As they grow, they sequester and store an increasing amount of carbon. Trees also contribute to the climate adaptation, resilience, and livability of cities. Their shade reduces urban heat and decreases the energy required to cool buildings during summer. Their leaves clean the air by filtering pollutants. Trees also substantially reduce storm water runoff into sewers during the heavy precipitation events that also are becoming more frequent as the climate warms.

These "ecosystem services" provided by trees makes tree planting an important response to climate change. I'm often asked my opinion on the best species to plant. There are many factors to consider such as size, ornamental traits, exposure, soil, and other site conditions. Climate change is increasingly an important factor because the climate is changing faster than the life span of a tree. A tree planted today will experience a very different climate as it matures. By the end of this century, for example, the climate of Ohio is projected to resemble the current climate of southern Tennessee and northern Alabama as Ohio's **USDA Plant Hardiness Zone transitions** from Zone 6 to Zone 8. It is important to select a tree species that is well adapted to our current climate (including severe cold snaps), and that will also be well adapted to our future climate.

When selecting "climate facing trees" I look to species that grow well now at a particular location and that also perform well farther south. Fortunately, Ohio is in a particularly sweet spot with many species of different sizes that fill that bill, making it easy to find a tree for about any location. Shade trees that will be very large at maturity include tuliptree, and white, red, and burr oak. Black gum, scarlet oak, and American hornbeam are good choices that won't be quite as massive. Attractive flowering trees for smaller spaces or under powerlines include redbud, serviceberry, Winter King hawthorn. I also look to trees that don't grow naturally this far north but that experience shows grow well when planted in Ohio. Examples include bald cypress, river birch, and sweet gum (if you don't want to be frustrated when raking the lawn choose a fruitless, male cultivar!).

My wife Cathy and I were seriously demoralized by the large number of trees we lost last summer to the derecho. The climate facing trees that we've planted this spring lifted our spirits and have us looking to the future!

Dan

Dan Herms Board Member

Meet our Newest KWLT Board Member



Dan Herms

has a calm, knowledgeable presence, a wealth of experience, and a lifelong interest in plants, trees and the natural world. He and his wife, Cathy (Board of Friends of Wooster Memorial

Dan Herms

Park), have been in the Wooster area since 1997 when they came to OARDC, Dan as a Professor of Entomology and Cathy as a research associate in the Department of Horticulture and Crop Science.

Dan is an Ohio native from Portsmouth. His family had been in the greenhouse business for five generations there. Dan got a degree from The Ohio State University in Landscape Horticulture, but a growing interest in trees led him to a PHD from Michigan State University in Forest Entomology. While in Michigan Dan worked at Dow Gardens in Midland, Michigan. Presently Dan is the Vice President of Research and Development

for Davey Tree Company which is based in Kent, OH, but works throughout the United States and Canada.

Dan became aware of KWLT through our newsletter, through Friends of Wooster Memorial Park and through neighbors and friends who also serve on the board of KWLT. He believes in the mission of KWLT---to offer a tool (easement) to protect land according to the owner's wishes, in perpetuity. He and Cathy recently completed a conservation easement on their property through KWLT.

Dan sees some of the challenges for KWLT as getting the word out about the mission of our land trust, the importance of sustainable land management, and helping landowners who might want to protect their property for the future. He believes that one of the most effective ways to preserve farmland and natural spaces is through voluntary efforts by private landowners. We are glad to welcome Dan to the Board of the Killbuck Watershed Land Trust.

Zemrock's Trees

The journey of building a healthy woodland

On an early morning in late January I had the pleasure of hiking and climbing the woods of the Zemrock Tree Farm. It was cold, but the sun was shining across a dusting of snow-covered trees and frozen grass on the frozen ground. I had first seen the farm nine months earlier, after Gordon and Beverly had inquired about preserving the land with a conservation easement through KWLT. The changes to the property from that point until now were incredible.

The Zemrocks purchased the 46-acre woods in 1981 and immediately began the difficult work of stewarding the woodland---invasive species removal, creating space for hardwoods to grow, cleaning out problem trees and creating food and cover for wildlife, among others. In 2009, after nearly 30 years and many long days of grunt work,



the property became a Certified Tree Farm. The Zemrocks' stewardship continued and ten years later, during the tree farm review, a forester told Gordon, "It's like a park in here." And that is just what local folks had begun to enjoy. Visitors and neighbors would hike the network of trails Gordon had created. Some trails were built to access and eradicate multiflora rose and grapevines, others simply to walk, listen to wildlife and smell the fresh air. With its many ravines collecting water and feeding Savage Run, which then spills into Killbuck Creek, this high-quality woodland was comparable to Wooster Memorial Park.



Nine months earlier, during my first visit, I could feel all of the time and physical effort that went into creating such a healthy woodland. But upon my return in January, the view was much different. Like many farmers and landowners here, the Zemrocks' woodland had been very nearly leveled by the June 13th/14th straight-line wind storms. Gordon remembers that late Monday night vividly.

"It was loud, like a train, but for almost two hours," he said.

During the storm Gordon hadn't thought about the trees coming down, except maybe the dead ones. But when he woke up Tuesday morning and walked outside, the destruction was overwhelming. His trails had disappeared. Instead of an open forest floor it was like the world had turned upside down around him, the canopy was on the floor and the roof was gone. Trees, trees and more trees-horizontal, stuck in the ground, shredded, snapped in the middle, tops gone, and branches laying everywhere. Big trunks laid out long on the ground and across ravines. Three, four and five trees stacked on top of one another, then stacked on the earth. Huge root systems exposing their underside web of wood and rock. It was a sight.

Gordon, being more interested in the health of the woodland than money from timber, wasn't sure what to do. Knowing how destructive salvage harvesting can be to the land and environment, he thought about just leaving the woods as is. But, it's hard to recreate and control invasive species when you can't physically get through the woods.

So, through consultations with his friend and forester, Gordon eventually decided to harvest the down and damaged trees. But, with more of an eye toward longterm health of the woodland as opposed to short-term profits. For instance, the trail network will be recreated and used to access the fallen trees, then repaired and seeded following the work. Timing of the harvest will ensure that the ground can support the equipment. Meanwhile, Gordon and his forester friend will monitor the effort to help prevent unnecessary scarring and destruction that can sometimes result from hasty harvesting work.

Following the harvest and trail restoration, the Zemrocks will once again embark on the journey of building a healthy woodland--invasive species removal, creating space for new hardwoods to grow, planting new trees and creating food and cover for wildlife, among others. Fortunately, the Zemrocks can feel confident that the canopy will be restored and the forest floor will once again open up for wildlife and recreation, for they have placed a conservation easement on their property. They have preserved their land in perpetuity from sub-division and future development...except maybe for a small cabin on the 0.4-acre set-aside in their easement.

Tate Emerson
Executive Director



Page 2 Page 3